IN THE CLAIMS

Please amend the claims as follows.

1. (Original) A method for providing a self heating adjustable titanium disilicon ($TiSi_2$) resistor, said method comprising the steps of:

placing a triangularly shaped layer of polysilicon on a layer of insulation material;

applying a layer of titanium over said triangularly shaped layer of polysilicon; and

heating said layer of titanium to form a triangularly shaped layer of C49 type titanium disilicon ($TiSi_2$) in said triangularly shaped layer of polysilicon.

2. (Original) The method as set forth in Claim 1 further comprising the steps of:

coupling a small end of said triangularly shaped layer of polysilicon to an input contact;

coupling a large end of said triangularly shaped layer of polysilicon to an output contact;

coupling an input metal connector to said input contact; and

coupling an output metal connector to said output contact.

3. (Original) The method as set forth in Claim 1 wherein a thickness of said layer of titanium is approximately five hundred Ångstroms (500 Å).

4. (Original) The method as set forth in Claim 1 wherein said step of heating said layer of titanium to form a layer of C49 type titanium disilicon ($TiSi_2$) in said triangularly shaped layer of polysilicon comprises the step of:

heating said layer of titanium to a temperature of approximately six hundred twenty degrees Centigrade.

5. (Original) The method as set forth in Claim 1 further comprising the step of:

removing unconverted titanium from said layer of C49 type $TiSi_2$ in said triangularly shaped layer of polysilicon.

6. (Currently Amended) A method for providing a self heating adjustable titanium disilicon ($TiSi_2$) resistor, said method comprising the steps of: ~~The method as set forth in Claim 1 further comprising the steps of:~~

placing a triangularly shaped layer of polysilicon on a layer of insulation material;

applying a layer of titanium over said triangularly shaped layer of polysilicon;

heating said layer of titanium to form a triangularly shaped layer of C49 type $TiSi_2$ in said triangularly shaped layer of polysilicon;

applying a current to said triangularly shaped layer of C49 type $TiSi_2$ in said triangularly shaped layer of polysilicon; and

converting a portion of said triangularly shaped layer of C49 type $TiSi_2$ to C54 type $TiSi_2$ to lower a resistance of said triangularly shaped layer of C49 type $TiSi_2$.

7. (Original) The method as set forth in Claim 6 wherein said step of converting a portion of said triangularly shaped layer of C49 type $TiSi_2$ to C54 type $TiSi_2$ comprises the steps of:

generating heat from said current in a high resistance portion of said triangularly shaped layer of C49 type $TiSi_2$; and

increasing a temperature of said high resistance portion of said triangularly shaped layer of C49 type $TiSi_2$ to a temperature that is at least approximately seven hundred degrees Centigrade.

8. (Original) The method as set forth in Claim 7 wherein said conversion of C49 type $TiSi_2$ to C54 type $TiSi_2$ in said high resistance portion decreases a resistance of said high resistance portion to a level of resistance where no more C49 type $TiSi_2$ is converted for said value of current.

9. (Original) The method as set forth in Claim 7 further comprising the step of:

selecting a desired value of resistance for said triangularly shaped layer of C49 type $TiSi_2$ by selecting a magnitude of said current.

10. (Original) The method as set forth in Claim 7 further comprising the step of:

decreasing a resistance of said triangularly shaped layer of C49 type $TiSi_2$ by increasing a magnitude of said current.

Claims 11-20 (Cancelled).

21. (New) A method, comprising:

forming a triangularly shaped resistor layer comprising C49 type titanium disilicon ($TiSi_2$); and

heating the resistor layer to alter a resistance of the resistor layer.

22. (New) The method of Claim 21, further comprising:

coupling a smaller end of the resistor layer to a first contact; and

coupling a larger end of the resistor layer to a second contact.

23. (New) The method of Claim 22, further comprising:

coupling a first metal connector to the first contact; and

coupling a second metal connector to the second contact.

24. (New) The method of Claim 21, wherein forming the resistor layer comprises:

depositing titanium on a triangularly shaped polysilicon layer; and

heating the titanium to form the C49 type $TiSi_2$.

25. (New) The method of Claim 24, wherein heating the titanium comprises:

heating the titanium to a temperature of approximately six hundred twenty degrees Centigrade.

26. (New) The method of Claim 24, wherein the titanium has a thickness of approximately five hundred Ångstroms (500 Å).

27. (New) The method of Claim 21, wherein heating the resistor layer comprises applying a current to the resistor layer to convert a portion of the C49 type $TiSi_2$ to C54 type $TiSi_2$.

28. (New) The method of Claim 27, wherein converting the portion of the C49 type $TiSi_2$ to C54 type $TiSi_2$ comprises:

increasing a temperature of a high resistance portion of the C49 type $TiSi_2$ to a temperature that is at least approximately seven hundred degrees Centigrade.

29. (New) The method of Claim 27, further comprising:

selecting a magnitude of the current to provide a desired resistance for the resistor layer.

30. (New) The method of Claim 27, further comprising:

decreasing the resistance of the resistor layer by increasing a magnitude of the current.